Appendix A

Claim Chart Comparing Interfering Claims

Applicants' Claim 32	**'196 Patent Claim 14**
32. A system for automated extraction of data from a molecular array having features arranged in a regular pattern, the system comprising: a scanning component that produces **an image** of the molecular array representing intensities of data signals emitted from discrete positions on a surface of the molecular array; a computer program that processes the **image** of the molecular array produced by the scanning component to **identify the location of** features in the **image** of the molecular array corresponding to molecules bound to features of the molecular array and that extracts data from the **located** features within **an image** of the molecular array; and a computer for executing the computer program.	14. A system for automated extraction of data from a molecular array having features arranged in a regular pattern, the system comprising: a scanning component that produces **images** of the molecular array representing intensities of data signals emitted from discrete positions on a surface of the molecular array; a computer program that processes the **images** of the molecular array produced by the scanning component to **index** features in the **images** of the molecular array corresponding to molecules bound to features of the molecular array and that extracts data from the **indexed** features within **images** of the molecular array; and a computer for executing the computer program.

Applicants' Claim 33	**'820 Patent Claim 1**
33. A method for evaluating an orientation of a molecular array having features arranged in a pattern, the method comprising: (a) receiving an image of the molecular	1. A method for evaluating an orientation of a molecular array having features arranged in a pattern, the method comprising: (a) receiving an image of the molecular

Applicants' Claim 33	**'820 Patent Claim 1**
array produced by scanning the molecular array to determine data signals emanating from discrete positions on a surface of the molecular array; (b) calculating an actual result of a function on pixels of the image lying in a pattern; and (c) altering the orientation of the pattern on the array and repeating steps **(a)** and **(b)** as needed until the results of the comparison are within the predetermined difference.	array produced by scanning the molecular array to determine data signals emanating from discrete positions on a surface of the molecular array; (b) calculating an actual result of a function on pixels of the image lying in a **second** pattern; **(c) comparing the result of step (b) with an expected result which would be obtained if the second pattern had a predetermined orientation on the array; and** **(d) when the results of the comparison in step (c) are outside a predetermined difference, then** altering the orientation of the **second** pattern on the array and repeating steps **(b)** and **(c), and repeating the foregoing** as needed until the results of the comparison are within the predetermined difference.